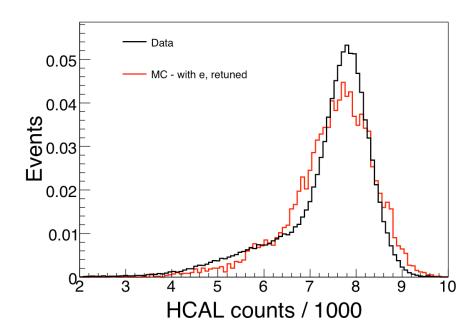
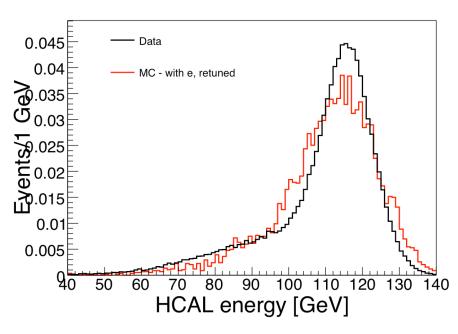
HCal Response





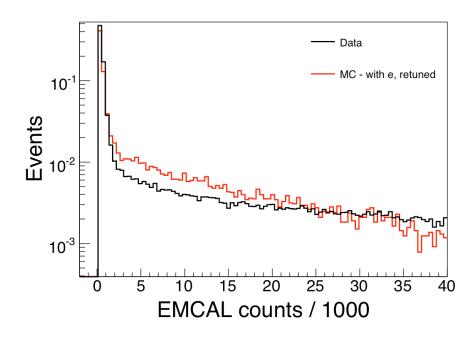
- 120 GeV protons on C
- MC: 10 subruns from Run 15326
 - new cutele, cutgam; *does not* have latest cuthad
- beam triggers for data
- protons identified by RICH
- MC: 108
- single track within Hcal
- With new cutele/cutgam, the HCal response increased by ~20%. I have accordingly re-tuned HCal Digitizer.

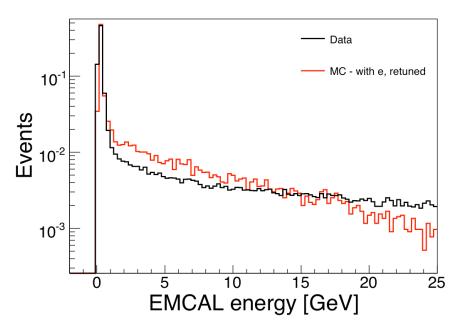
Top: HCal raw ADC

• Bot: HCal Energy

HCal agrees better now (before: MC was lower by ~10%)

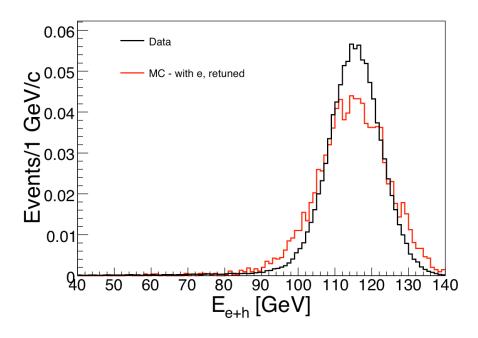
EMCal Response

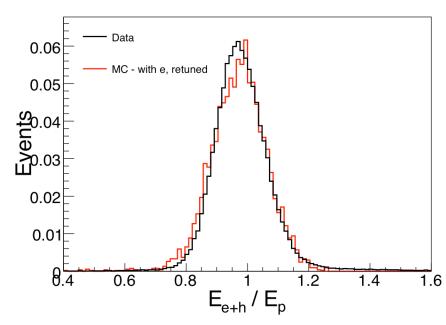




- 120 GeV protons on C
- MC: 10 subruns from Run 15326
 - new cutele, cutgam; *does not* have latest cuthad
- beam triggers for data
- protons identified by RICH
- MC: 108
- Top: EMCal raw ADC
- Bot: EMCal Energy
- The new cutele/cutgam has improved the high end tail.

EM+H Response





• Top: Total Cal Energy for protons

• Bot:
$$\frac{E_{e+h}}{E_p}$$

• Earlier, MC was lower by $\sim 10\%$

MC Processing

- Release R09.05.04 tagged -- new cutele, cutgam, cuthad
- e907mc underway on the grid.
 - Takes ~ x3 longer [~5.5hrs/subrun now vs. ~2hrs/subrun before]
 - Geant output filesize is $\sim 50\%$ larger [~ 2.2 GB/subrun now vs. ~ 1.4 GB before]

```
- 1448746083 Mar 30 23:31 mippmc20014498.000029.root

- 1463547416 Mar 31 01:20 mippmc20014498.000030.root

- 1469391292 Mar 31 03:10 mippmc20014498.000031.root

- 2186043305 May 5 02:21 mippmc20014498.000037.root

- 2223987116 May 5 07:41 mippmc20014498.000038.root

- 2220641984 May 5 13:02 mippmc20014498.000039.root
```

• Digitized+Reconstructed DST output is ~x2 larger.

```
    pass4d2/14/4/mippHist20014498.29.mcdigireco.root
    pass4d2/14/4/mippHist20014498.30.mcdigireco.root
    pass4d3/14/4/mippHist20014498.37.mcdigireco.root
    pass4d3/14/4/mippHist20014498.38.mcdigireco.root
    pass4d3/14/4/mippHist20014498.38.mcdigireco.root
```